Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original): A semiconductor junction device, comprising:

a substrate;

a first material extending substantially vertically from said substrate;

said first material having a sidewall and an upper surface; and

a second material;

said second material joined to at least a portion of said sidewall and to at least a portion of said upper surface of said first material;

wherein a junction is formed between said first and second materials.

2. (original): A semiconductor junction device as recited in claim 1, further comprising:

a first electrical contact connected to said first material; and

a second electrical contact connected to said second material.

3. (original): A semiconductor junction device as recited in claim 1, wherein said junction comprises a *pn* junction.

4. (original): A semiconductor junction device as recited in claim 1, wherein said junction comprises an *in* junction.

5. (original): A semiconductor junction device as recited in claim 1, wherein said junction comprises a *pi* junction.

6. (original): A semiconductor junction device, comprising:

a substrate;

a first material extending substantially vertically from said substrate;

said first material comprising a semiconductor material;

said first material having a sidewall and an upper surface; and

a second material;

said second material joined to at least a portion of said sidewall and to at least a portion of said upper surface of said first material;

wherein a junction is formed between said first and second materials.

7. (original): A semiconductor junction device as recited in claim 6, further comprising:

a first electrical contact connected to said first material; and

a second electrical contact connected to said second material.

8. (original): A semiconductor junction device as recited in claim 6, wherein said junction comprises a *pn* junction.

9. (original): A semiconductor junction device as recited in claim 6, wherein said junction comprises an *in* junction.

10. (original): A semiconductor junction device as recited in claim 6, wherein said junction comprises a *pi* junction.

11. (original): A semiconductor junction device, comprising:

a substrate;

a first material extending substantially vertically from said substrate;

said first material having a sidewall and an upper surface; and a second material;

said second material comprising a semiconductor material;

said second material joined to at least a portion of said sidewall and to at least a portion of said upper surface of said first material;

wherein a junction is formed between said first and second materials.

12. (original): A semiconductor junction device as recited in claim 11, further comprising:

a first electrical contact connected to said first material; and

a second electrical contact connected to said second material.

13. (original): A semiconductor junction device as recited in claim 11, wherein said junction comprises a *pn* junction.

14. (original): A semiconductor junction device as recited in claim 11, wherein said junction comprises an *in* junction.

15. (original): A semiconductor junction device as recited in claim 11, wherein said junction comprises a *pi* junction.

16. (original): A semiconductor junction device, comprising:

a substrate;

a first semiconductor material extending substantially vertically from said substrate;

said first material having a sidewall and an upper surface; and

a second semiconductor material;

said second material joined to at least a portion of said sidewall and to at least a portion of said upper surface of said first material;

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wherein a junction is formed between said first and second materials.

17. (original): A semiconductor junction device as recited in claim 16, further comprising:

a first electrical contact connected to said first material; and

a second electrical contact connected to said second material.

18. (original): A semiconductor junction device as recited in claim 16, wherein said junction comprises a *pn* junction.

19. (original): A semiconductor junction device as recited in claim 16, wherein said junction comprises an *in* junction.

20. (original): A semiconductor junction device as recited in claim 16, wherein said junction comprises a *pi* junction.

21. (original): A semiconductor junction device, comprising:

a substrate;

a first material extending substantially vertically from said substrate;

said first material comprising a doped semiconductor material;

said first material having a sidewall and an upper surface; and

a second material;

said second material comprising a semiconductor material;

said second material joined to at least a portion of said sidewall and to at least a portion of said upper surface of said first material;

wherein a junction is formed between said first and second materials.

22. (original): A semiconductor junction device as recited in claim 21, further comprising:

a first electrical contact connected to said first material; and

a second electrical contact connected to said second material.

23. (original): A semiconductor junction device as recited in claim 21, wherein said junction comprises a *pn* junction.

24. (original): A semiconductor junction device as recited in claim 21, wherein said junction comprises an *in* junction.

25. (original): A semiconductor junction device as recited in claim 21, wherein said junction comprises a *pi* junction.

26. (original): A semiconductor junction device, comprising:

a substrate;

a first material extending substantially vertically from said substrate;

said first material comprising a semiconductor material;

said first material having a sidewall and an upper surface; and

a second material;

said second material comprising a doped semiconductor material;

said second material joined to at least a portion of said sidewall and to at least a portion of said upper surface of said first material;

wherein a junction is formed between said first and second materials.

27. (original): A semiconductor junction device as recited in claim 26, further comprising:

a first electrical contact connected to said first material; and a second electrical contact connected to said second material.

28. (original): A semiconductor junction device as recited in claim 26, wherein said junction comprises a *pn* junction.

29. (original): A semiconductor junction device as recited in claim 26, wherein said junction comprises an *in* junction.

30. (original): A semiconductor junction device as recited in claim 26, wherein said junction comprises a *pi* junction.

31. (original): A semiconductor junction device, comprising:

a substrate;

a first doped semiconductor material extending substantially vertically from said substrate;

said first material having a sidewall and an upper surface; and

a second doped semiconductor material;

said second material joined to at least a portion of said sidewall and to at least a portion of said upper surface of said first material;

wherein a junction is formed between said first and second materials.

32. (original): A semiconductor junction device as recited in claim 31, further comprising:

a first electrical contact connected to said first material; and

a second electrical contact connected to said second material.

33. (original): A semiconductor junction device as recited in claim 31, wherein said junction comprises a *pn* junction.

34. (withdrawn): A semiconductor junction device, comprising:

a substrate;

a first semiconductor material extending substantially vertically from said substrate;

said first material having a sidewall and an upper surface;

a second semiconductor material;

said second material joined to at least a portion of said sidewall and to at least a portion of said upper surface of said first semiconductor material; and

a third semiconductor material;

said third material joined to at least a portion of said second material;

wherein a first junction is formed between said first and second materials;

wherein a second junction is formed between said second and third materials; and

wherein said first material is electrically isolated from said third material.

35. (withdrawn): A semiconductor junction device as recited in claim 34, further comprising:

a first electrical contact connected to said first material;

a second electrical contact connected to said second material; and

a third electrical contact connected to said third material.

36. (withdrawn): A semiconductor junction device as recited in claim 34, wherein said first junction comprises a *pn* junction.

37. (withdrawn): A semiconductor junction device as recited in claim 34, wherein said first junction comprises an *in* junction.

38. (withdrawn): A semiconductor junction device as recited in claim 34, wherein said first junction comprises a *pi* junction.

39. (withdrawn): A semiconductor junction device as recited in claim 34, wherein said second junction comprises a *pn* junction.

40. (withdrawn): A semiconductor junction device as recited in claim 34, wherein said second junction comprises an *in* junction.

41. (withdrawn): A semiconductor junction device as recited in claim 34, wherein said second junction comprises a *pi* junction.

42. (withdrawn): A semiconductor junction device as recited in claim 34, wherein said first and second junctions are configured as a bipolar transistor.

43. (withdrawn): A semiconductor junction device as recited in claim 42, wherein said bipolar transistor comprises a *npn* transistor.

44. (withdrawn): A semiconductor junction device as recited in claim 42, wherein said bipolar transistor comprises a *pnp* transistor.

45. (withdrawn): A semiconductor junction device as recited in claim 34, wherein said first and second junctions are configured as a *pin* junction device.

46. (withdrawn): A semiconductor junction device as recited in claim 34, wherein said first and second junctions are configured as a *pip* junction device.

47. (withdrawn): A semiconductor junction device, comprising:

a substrate;

a first material extending substantially vertically from said substrate;

said first material comprising a doped semiconductor material;

said first material having a sidewall and an upper surface;

a second material;

said second material comprising a semiconductor material;

said second material joined to at least a portion of said sidewall and to at least a portion of said upper surface of said first material; and

a third material;

said third material comprising a doped semiconductor material;

said third material joined to at least a portion of said second material;

wherein a first junction is formed between said first and second materials;

wherein a second junction is formed between said second and third materials; and

wherein said first material is electrically isolated from said third material.

48. (withdrawn): A semiconductor junction device as recited in claim 47, further comprising:

a first electrical contact connected to said first material;

a second electrical contact connected to said second material; and

a third electrical contact connected to said third material.

49. (withdrawn): A semiconductor junction device as recited in claim 47, wherein said first junction comprises a *pn* junction.

50. (withdrawn): A semiconductor junction device as recited in claim 47, wherein said first junction comprises an *in* junction.

51. (withdrawn): A semiconductor junction device as recited in claim 47, wherein said first junction comprises a *pi* junction.

52. (withdrawn): A semiconductor junction device as recited in claim 47, wherein said second junction comprises a *pn* junction.

53. (withdrawn): A semiconductor junction device as recited in claim 47, wherein said second junction comprises an *in* junction.

54. (withdrawn): A semiconductor junction device as recited in claim 47, wherein said second junction comprises a *pi* junction.

55. (withdrawn): A semiconductor junction device as recited in claim 47, wherein said first and second junctions are configured as a bipolar transistor.

56. (withdrawn): A semiconductor junction device as recited in claim 55, wherein said bipolar transistor comprises a *npn* transistor.

57. (withdrawn): A semiconductor junction device as recited in claim 55, wherein said bipolar transistor comprises a *pnp* transistor.

58. (withdrawn): A semiconductor junction device as recited in claim 47, wherein said first and second junctions are configured as a *pin* junction device.

59. (withdrawn): A semiconductor junction device as recited in claim 47, wherein said first and second junctions are configured as a *pip* junction device.

60. (withdrawn): A semiconductor junction device, comprising:

a substrate;

a first doped semiconductor material extending substantially vertically from said substrate;

said first doped semiconductor material having a sidewall and an upper surface;

a second doped semiconductor material;

said second doped semiconductor material joined to at least a portion of said sidewall and to at least a portion of said upper surface of said first doped semiconductor material; and

a third doped semiconductor material;

said third doped semiconductor material joined to at least a portion of said second doped semiconductor material;

wherein a first junction is formed between said first and second materials;

wherein a second junction is formed between said second and third materials; and

wherein said first material is electrically isolated from said third material.

61. (withdrawn): A semiconductor junction device as recited in claim 60, further comprising:

a first electrical contact connected to said first material;

a second electrical contact connected to said second material; and

a third electrical contact connected to said third material.

62. (withdrawn): A semiconductor junction device as recited in claim 60, wherein said first junction comprises a *pn* junction.

63. (withdrawn): A semiconductor junction device as recited in claim 60, wherein said second junction comprises a *pn* junction.

64. (withdrawn): A semiconductor junction device as recited in claim 60, wherein said first and second junctions are configured as a bipolar transistor.

65. (withdrawn): A semiconductor junction device as recited in claim 64, wherein said bipolar transistor comprises a *npn* transistor.

66. (withdrawn): A semiconductor junction device as recited in claim 64, wherein said bipolar transistor comprises a *pnp* transistor.

Claims 67-91 (canceled)